PATENT SPECIFICATION

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PROVISIONAL SPECIFICATION.

New or Improved Milk-testing Appliance.

I, GEORGE SUTHERLAND THOMSON, a British subject, of 31, Tooley Street, London, S.E. 1, do hereby declare the nature of this invention to be as follows:—

This invention relates to a new or improved milk-testing appliance and provides an appliance of simple construction by the use of which tests as to foreign matter contained therein, may be rapidly carried out.

The apparatus according to the invention comprises a metal container, preferably of cylindrical shape, provided at one end with a detachable perforated nozzle end, and at the other end with means for forcing air into the container and creating a pressure therein, consisting of a compressible bulb and rubber or other flexible tubing connected to said bulb and to a detachable lid or end plate fitted to the container. The detachable perforated nozzle is adapted to hold a renewable piece of linen or other suitable fabric or fine gauze material through which the milk has to pass in delivery from the nozzle.

A preferred construction of appliance according to the invention comprises a cylindrical container of aluminium or other suitable material, which is externally flanged at one end and at the other end is formed with a reduced neck. Said neck, which forms a nozzle, is adapted to receive a nozzle cap and is furnished with bayonet pins adapted to engage the bayonet slots in said cap. Within the cap there is inserted a loose and detachable perforated metal plate, a piece of linen or other suitable cloth or very fine gauze material, and a resilient washer which holds said fine gauze material in place between itself and the perforated plate and is adapted to seat on the end of the nozzle.

A recessed lid is adapted to fit in the other, flanged end of the container, said lid having a flange which seats down on the container flange, there being an interposed resilient washer. The lid is centrally apertured and shaped to form an exterior nose on which is adapted to fit the outer end of a rubber tube from a compressible rubber bulb fitted with a non-return inlet valve.

The lid of the container which is removed in order to fill said container, is detachably held in place by means of a pair of catch members pivotally carried by lugs secured to the container, said catch members, which are of wire, being of substantially U-shape and having their outer parts bent at right-angles to their main parts. Said bent parts are adapted to fit over the outer edge of the lid when the catches are swung up into locking position.

The pressure of air produced in the container by compressing the bulb, is effective in forcing the milk through the filtering nozzle in a minimum period of time.

Dated this 29th day of January, 1926.

KINGS PATENT AGENCY LIMITED,
By BENJ. T. KING,
Director,
Registered Patent Agent,
146A, Queen Victoria Street, London, E.C. 4,
Agents for Applicant.

COMPLETE SPECIFICATION.

New or Improved Milk-testing Appliance.

I, GEORGE SUTHERLAND THOMSON, a British subject, of 31, Tooley Street, London, S.E. 1, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to a new or improved milk-testing appliance and provides an appliance of simple construction by the use of which tests as to foreign matter contained therein, may be rapidly carried out.

The invention refers to apparatus for the purpose aforesaid, of the known type comprising a cylindrical receptacle, at one end of which is clamped a perforated filtering member and to the other end of which there is connected by tubing, a compressible rubber ball for forcing the liquid from the container by way of the filtering member.

The present invention provides improved and simplified apparatus of the foregoing type and comprises in combination a cylindrical container reduced in size at one end to form a delivery neck, a filtering cap detachably fitting on said neck, a perforated plate, a filtering fabric or gauze disc and a resilient washer all housed within the said cap, a flanged end to the container, remote from the delivery neck thereof, a recessed lid adapted to fit the said flanged end of the container, an exterior nose on the said lid, and a compressible rubber bulb with a tube connection to the said nose for creating an air pressure in the container.

It is known that a previously proposed appliance for ascertaining the quantity of sediment in milk has comprised a cylindrical container having a reduced neck, a filtering cap detachably fitting by a bayonet socket joint on said neck, a gauze seat and a filtering disc housed within the cap, and means for creating an air pressure within the container applied to the other end thereof, consisting of a detachable but rigidly held plunger pump.

A preferred construction of appliance according to the invention is illustrated in the accompanying sheet of drawings wherein:—

Figure 1 is a perspective view of the appliance and

Figure 2 is a part-sectional side view of the container portion.

Referring to the drawings, the appliance illustrated therein comprises a cylindrical container 1 of aluminium or other suitable metal, having an external flange 2 at one end and formed with a reduced neck 3 at the other end. Said neck, which forms a nozzle, is adapted to receive a filtering cap 4, and is furnished with bayonet pins 5 adapted to engage the bayonet slots 6 in said cap. Within the cap there is inserted a loose and detachable perforated metal plate 7, a piece of linen or other suitable cloth, fabric or very fine gauze material 8 and a detachable resilient rubber or like washer 9 which holds said fine gauze material 8 in place between itself and the perforated plate 7 and is adapted to seat on the end of the nozzle 3. Alternatively the perforated plate 7 may be permanently fixed in place within the cap 4 by pressing inwardly the wall of the latter, or in other suitable manner.

A recessed lid 10 is adapted to fit in the other flanged end of the container, said lid having a flange 10^a which seats down on the container flange 2, there being an interposed resilient washer 11. The lid 10 is centrally apertured and shaped to form an exterior nose 12 on which is adapted to fit the outer end of a rubber tube 13 from a compressible rubber bulb 14 fitted with a non-return inlet valve 15.

The lid 10 of the container which is removed in order to fill said container, is detachably held in place by means of a pair of catch members 16 pivotally carried by lugs 17 secured to the container, said catch members 16 which are of wire, being of substantially U-shape and having their outer parts 18 bent at right-angles to their main parts 16. Said bent parts 18 are adapted to fit over the outer edge of the lid 10 when the catches are swung up into locking position.

The pressure of air produced in the container by compressing the bulb 14 is effective in forcing the milk through the filtering cap in a minimum period of time.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. A milk-testing appliance of the type

herein set forth comprising in combination a cylindrical container reduced in size at one end to form a delivery neck, a filtering cap detachably fitting on said neck, a perforated plate, a filtering fabric or gauze disc and a resilient washer all housed within the said cap, a flanged end to the container, remote from the delivery neck thereof, a recessed lid adapted to fit the said flanged end of the container, an exterior nose on the said lid, and a compressible rubber bulb with a tube connection to the said nose for creating an air pressure in the container, substantially as herein described.

2. A milk testing appliance as claimed in Claim 1 wherein the recessed lid is engaged and held in place by bent-over extremities of a pair of catch members pivotally carried by the container, substantially as herein described.

3. The milk-testing appliance herein described and illustrated in the accompanying drawings.

Dated this 27th day of September, 1926.

KINGS PATENT AGENCY LIMITED,
By BENJ. T. KING,
Director,
Registered Patent Agent,
146A, Queen Victoria Street, London, E.C. 4,
Agents for Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1927.

[This Drawing is a reproduction of the Original on a reduced scale.]

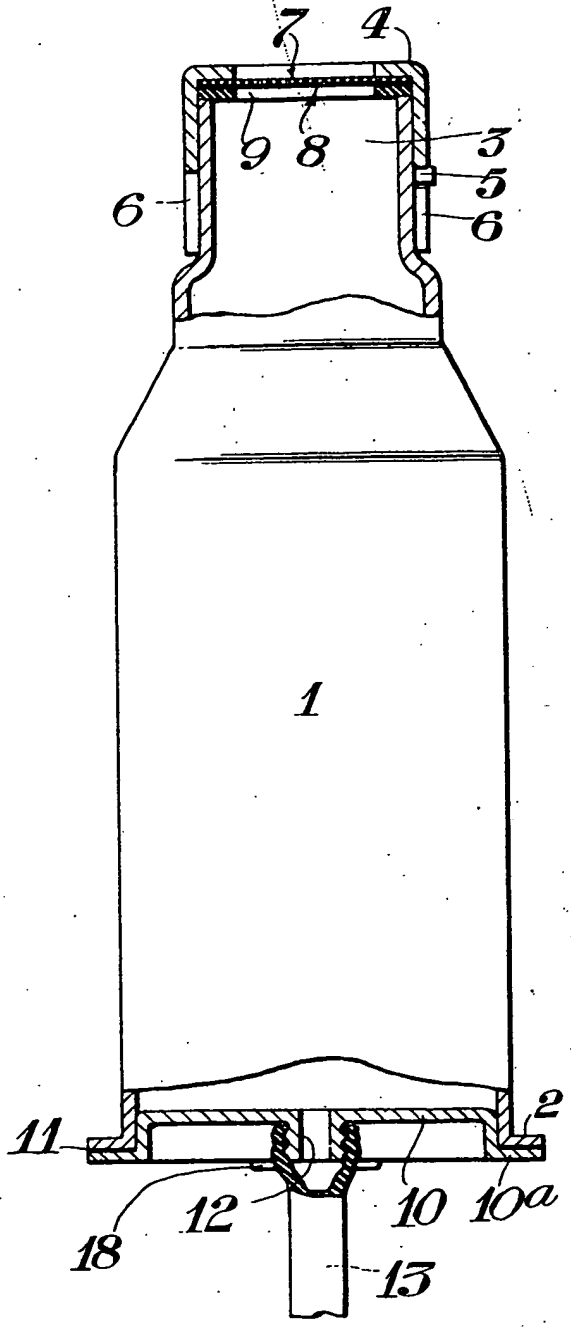

Fig. 2.

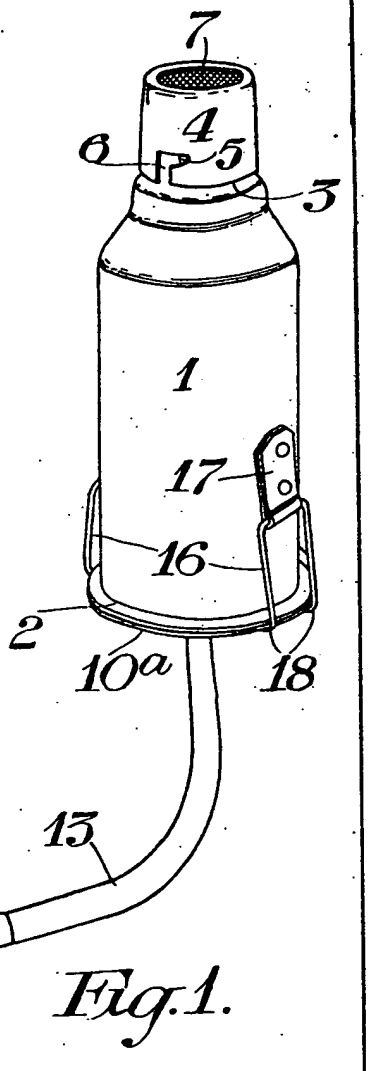

Fig. 1.

Charles & Read Ltd Photo Litho.